MT Traffic Records Strategic Plan

Annual Element: 2016

Prepared for:
Montana Traffic Records Coordinating Committee

Update completed:
June 2016

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INTRODUCTION

OVERVIEW: WHAT IS THE TRSP ANNUAL ELEMENT

The *Traffic Records Strategic Plan* is the blueprint for TRCC activities over the next five years. While the TRSP accounts for the broad view of the activities going on in all parts of the traffic records system, the TRSP Annual Element provides needed updates in a shorter time frame. The TRSP Annual Element will be maintained and updated annually by the TRCC to provide documentation and updates for Montana's existing traffic safety programs and to report the status of the TRSP implementation, including an updated timeline. This task is especially important as technology advances are made and critical systems are developed.

ACTIVE PROJECTS

LEAD AGENCY	PROJECT NAME
DOJ/MHP	Web-Based Crash Reporting
MDT/Engineering	SIMS: Safety Information Management System
Montana TRCC	TRCC Strategic Plan Update and SWOT analysis
DOJ/MHP	DOJ MHP Upgrades to JRCS System
MDT Road Data	Traffic Data Management System

WEB-BASED CRASH REPORTING (WBCR)

Project ID: MT-P-00034

TRCC Project Priority: High

Lead Agency: Dept of Justice – Montana Highway Patrol

Project Director / Primary Contact:

Name:	James Thomas	Major Tom Butler
Title:	Bureau Chief	Operations Commander
Agency:	MT Dept of Justice	MT Dept of Justice
Office:	JITSD/Support Services Bureau	Montana Highway Patrol
Address:	303 N Roberts	2550 Prospect Ave, PO Box 201419
City, ZIP:	Helena, MT 59620	Helena, MT 59620-1419
Phone:	406-444-0553	406-444-3588
Email:	jathomas@mt.gov	tobutler@mt.gov

Partner Agencies:

Name of the Agencies that are partners with the Lead Agency in the implementation of the project. Partner agencies may not be relevant to most projects, but if included, this helps document that more than one agency is responsible for the implementation and ultimate success of the project.

- Department of Transportation

Project Description:

This section provides a brief overview of what the project will entail.

Provides a means for local law enforcement to enter crash data directly into SmartCop's web-based crash reporting system. This also includes a data support project manager who will ensure that all crash reporting agencies across the state will use a standardized MMUCC compliant form.

Projected Budget by Funding Source:

Provide funding source and projected budgets by year for the project. This will help establish future year funding estimates for the Section 408 funded programs and will demonstrate other funds being leveraged to improve the state traffic records system. (Show estimated thousands of dollars by state fiscal year.)

Funding Source	2010	2011	2012	2013	2014	2015	Total
408 Funding: Web-Based Crash Reporting	$23,000	$92,000	$0	$0	$0	$0	$115,000.00
408 Funding: WBCR Trainer	$36,694	$92,024	$92,024	$0	$0	$0	$220,742.00
DOJ	$0	$133,000	$0	$0	$0	$0	$133,000.00
Crash Data Improvement Program Funds (FHWA)	$50,000	$0	$0	$0	$0	$0	$50,000.00

Project Area(s) and System(s)

Check all that apply.

	Accuracy	Completeness	Integration	Timeliness	Uniformity	Accessibility
Crash	☒	☒	☒	☒	☒	☒
Driver License/History	☐	☐	☐	☐	☐	☐
Injury Surveillance/EMS	☐	☐	☐	☐	☐	☐

Roadway	☐	☐	☐	☐	☐	☐
Citation/Adjudication	☐	☐	☐	☐	☐	☐
Vehicle Registration	☐	☐	☐	☐	☐	☐

Project Milestones:

Milestone	Projected Completion Date	Actual Completion Date	Status
WBCR Design	July 2010		Complete
Local law enforcement sites and personnel are identified for training and field testing of WBCR			Complete
All test sites are confirmed to have the acceptable environments for testing WBCR			Complete
Test plan, test cases and acceptance criteria developed	April 2011		On Schedule
Retirement of MARS	December 2010	December 2010	Complete
Development and internal testing of the WBCR application by CTS America	February 2011	March 30 , 2012	Complete
Initial field test occurs at MHP HQ in Helena	March 2011		Active
Training plan and materials are developed for local law enforcement	April 2011		Active
Training local agency representatives on new application, including testing process and acceptance criteria	May 2012		Active
Field testing of WBCR	April 2012		
WBCR Acceptance	April 2012		Active
WBCR roll-out and available for production use	May 2012		
Train larger law enforcement agencies on new WBCR system	October 2012		
Train remaining law enforcement agencies on new WBCR system	October 2013		
Train larger law enforcement agencies on new WBCR system	October 2012		
Train remaining law enforcement agencies on new WBCR system	October 2013		

Performance Measure(s):

Determine at least one performance measure for each planned/start-up/active project. The performance measure(s) must conform to one of the model performance measures published by NHTSA as a guide to help States monitor and improve the quality of the data in their traffic records systems.

Performance Area: Timeliness
System: Crash
Increase/Decrease: Increase
Measurement:
The percent of crash reports entered into the database within 10 days after the crash within a period determined by the State. (C-T-3)

Measurement Method:
Using crashes that occur from January through March, take the number of crash reports entered into the database within 10 days after the crash and divide that number by the total number of crashes that occurred during the timeframe.

The actual method used to capture the measure is still being developed. The baseline value and goals will be determined once the measurement can be obtained.

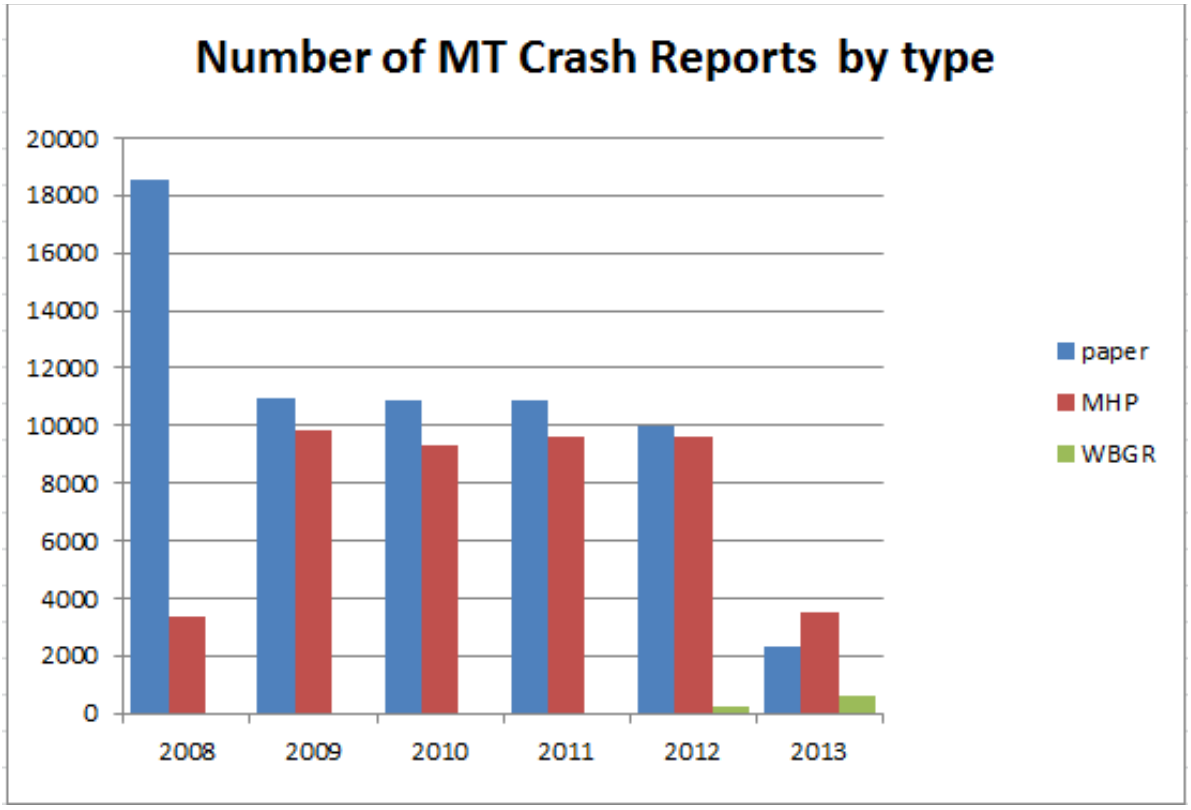
Performance Area: Uniformity
System: Crash
Increase/Decrease: Increase
Measurement:
The number and percent of crash reports entered into a database via a common statewide uniform format within a period defined by the State. (C-U-2)

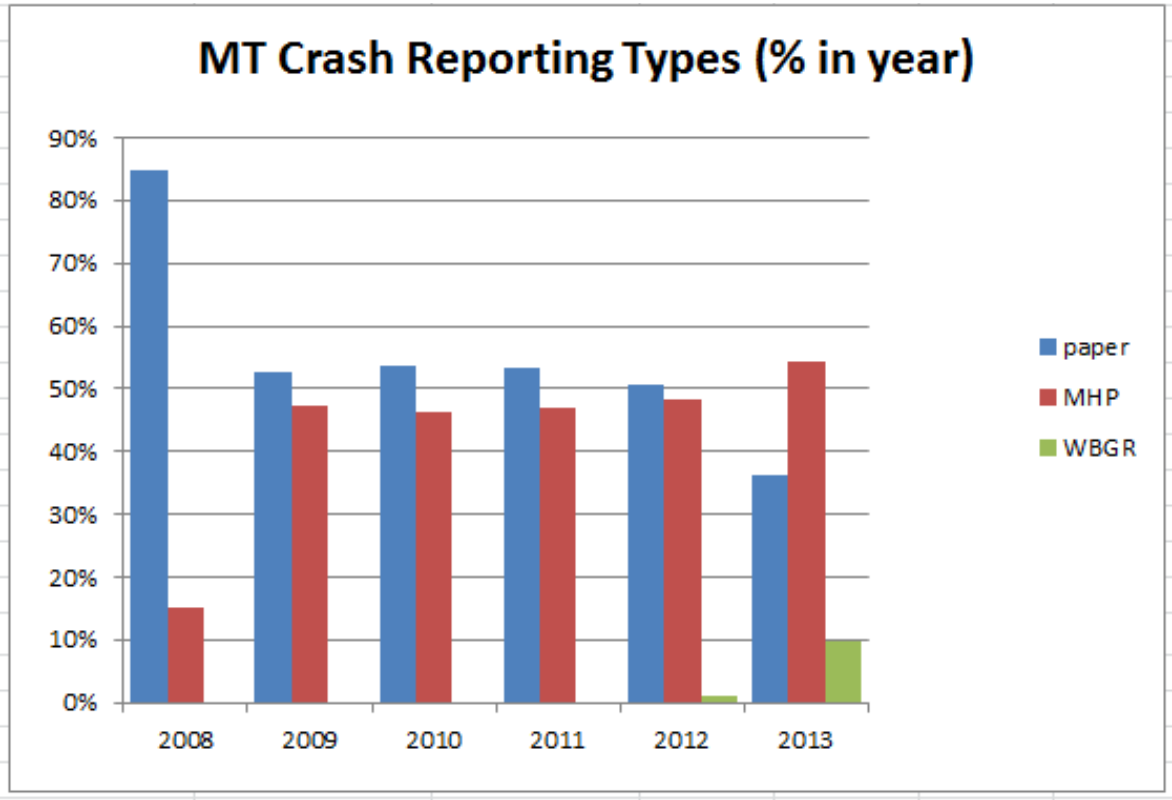
Measurement Method:
Using crash date, take the number of crash reports entered electronically and divide that number by the total number of crashes that occurred during the timeframe. Include the raw number of crash reports entered electronically as part of the measurement.

The figures below clearly illustrate the availability of the data for establishing this performance measure. The baseline for this performance measure will be established using 2012 and 2013 calendar years data, to create 2014 and 2015 calendar year target in early spring (March-April) of 2014.

MHP enters data from three distinct sources:

- "paper" represents data entered into the MHP database from written reports created by some local policing agencies
- "MHP" represents data entered digitally by MHP digitally through Smart-Cop
- "WBCR" represent data entered digitally by some local policing agencies through Web-Based Crash Reporting




MT Crash Reporting Types (% in year)
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008
2009
2010
2011
2012
2013
paper
MHP
WBGR

Performance Area: Timeliness
System: Crash
Increase/Decrease: Increase
Measurement:
The median or mean number of days from (a) the crash date to the date the crash report is entered into the database. (C-T-1)

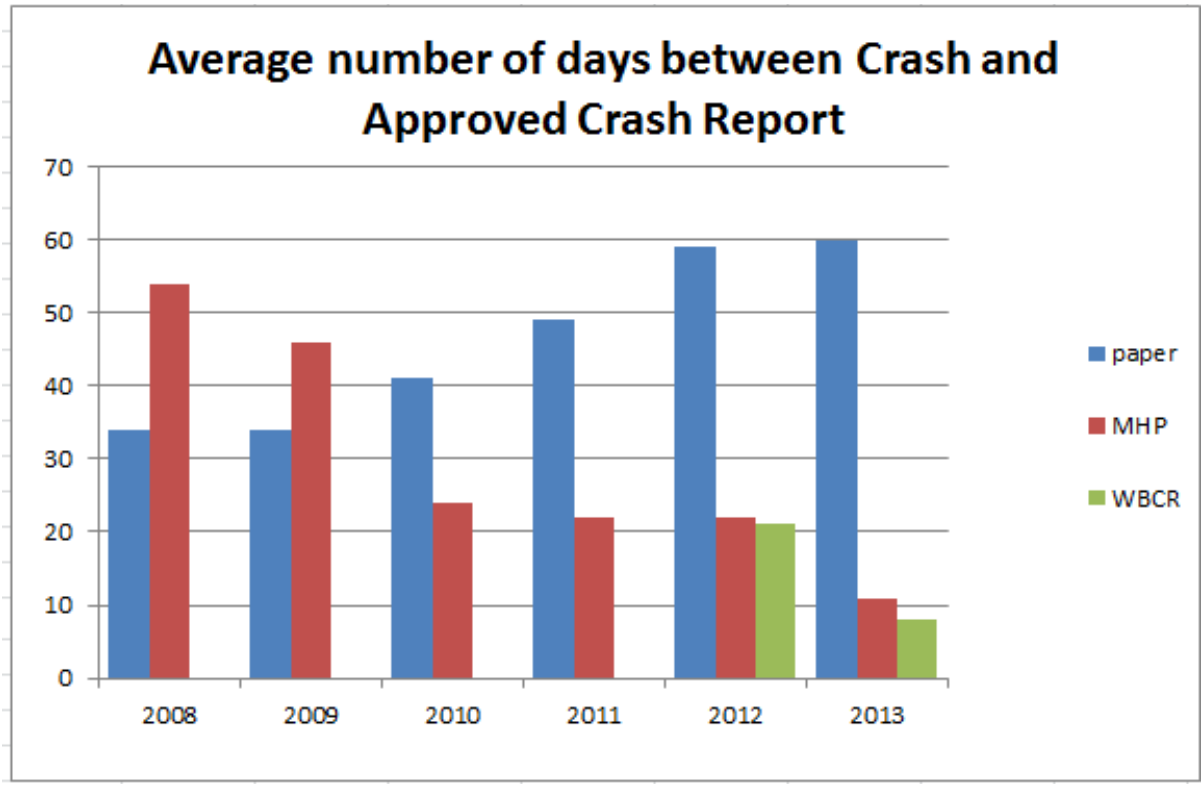
Measurement Method:
Averaging the difference between the crash date and the date the crash report is approved for database use.

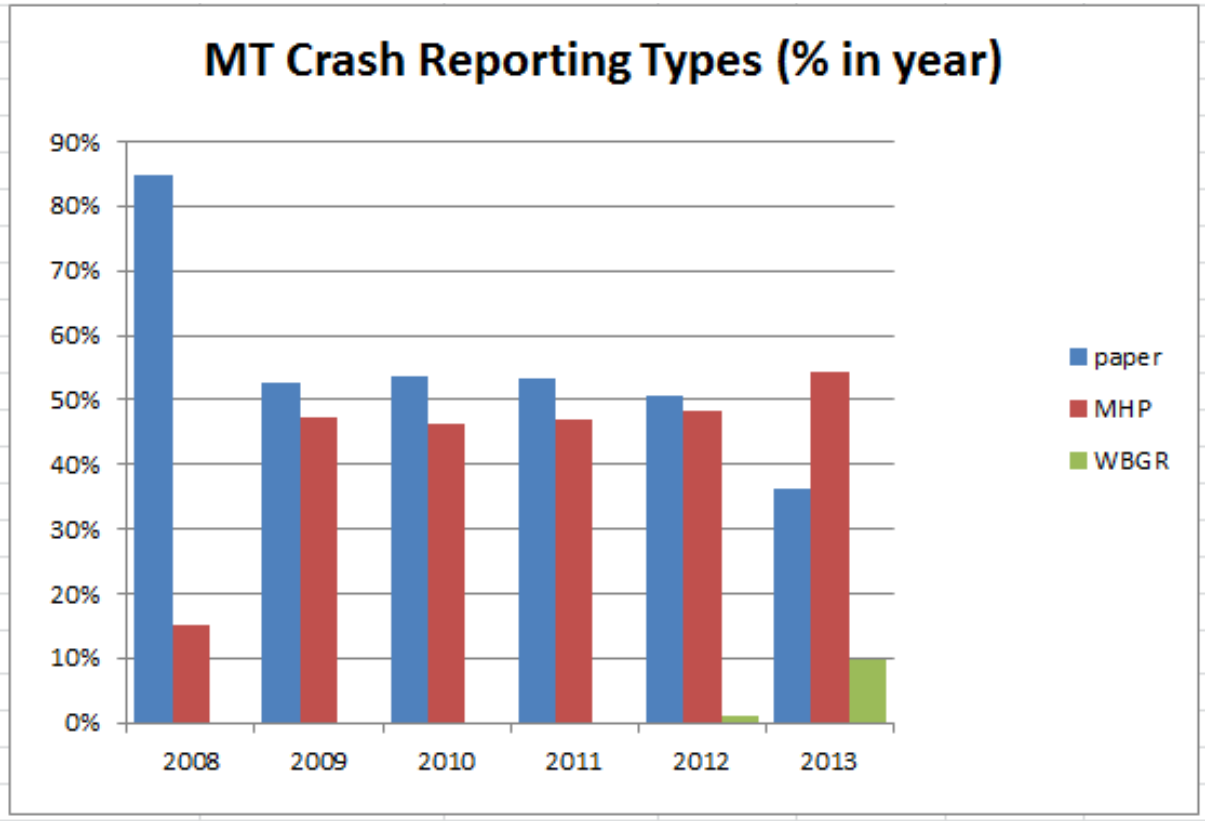
MHP enters data from three distinct sources:

- "paper" represents data entered into the MHP database from written reports created by some local policing agencies
- "MHP" represents data entered digitally by MHP digitally through Smart-Cop
- "WBCR" represent data entered digitally by some local policing agencies through Web-Based Crash Reporting

The baseline for this performance measure will be established using 2012 and 2013 calendar year data, to create 2014 and 2015 calendar year target in early spring (March-April) of 2014. (2012's average from data illustrated below is 41 days, while 2013's is 28 days)

The two figures below illustrate MHP's transition from paper reporting to digital Smart-Cop reporting from 2008 to the present.




MT Crash Reporting Types (% in year)
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008
2009
2010
2011
2012
2013
paper
MHP
WBGR

June 2016 – WBCR Performance Table 2012 through March 2016

Year (April 1 - March 31)	Quarter	Timeliness (Average # of days)			Report Volume (# of submitted reports)		
		SmartCop*	WBCR*	Paper**	SmartCop*	WBCR*	Paper**
2012	1	40.0		58.7	1946		2434
2012	2	33.9	9.0	41.7	2423	51	2364
2012	3	20.4	16.5	60.4	3036	173	2682
2012	4	25.7	14.0	63.3	2258	384	2110
2013	1	25.1	8.7	59.4	2100	319	2033
2013	2	20.4	19.6	57.6	2563	282	2212
2013	3	15.6	23.1	46.6	3397	525	2337
2013	4	18.2	12.3	62.2	2894	541	2328
2014	1	22.1	15.3	29.2	2059	366	1779
2014	2	21.2	17.2	28.1	2698	525	1902
2014	3	16.2	17.0	27.0	3615	718	2389
2014	4	20.7	14.0	36.1	2447	533	1882
2015	1	23.8	16.7	35.8	2410	527	1896
2015	2	19.4	18.2	43.2	3058	600	2066
2015	3	14.8	15.8	37.5	4062	766	2303
2015	4	14.2	12.5	36.6	2414	575	1702
4 Year Trend		-17%	5%	-17%	7%	31%	-7%

** - SmartCop and WBCR are electronically submitted into MHP database*

*** - Paper are crash reports hand entered into the MHP database by MHP personnel*

Activity Reports:
April 2015 – April 2016

Data Support Project Manager (Cal Schock) *Quarterly report*

Year 5 of 4 year contract ***FFY 2015***

008

	Q1: Oct 1 – Dec 31
	Q2: Jan 1 – Mar 31
X	Q3: Apr 1 – Jun 30
	Q4: Jul 1 – Sep 30

A. Contract deliverables & milestones

If an action item will not be completed on schedule, please indicate a timeframe for completion in the progress notes, and the reason for the delay.

1. Local agencies contacted in relation to the WBCR Project.

	Location	**Date/time**	**Topic(s)**	**Attendee information** *(e.g. prosecutors, law enforcement, DUI task forces)*	**# attendees**
1	Sheridan County	**3/15**	Initial contact	Sheriff Ulrickson	1
2	Northern Tribes Task Force	**4/9**	Initial meeting plan for demo	Sheila Cozzie	1
3	MSU Police	**4/24**	Final Planning meeting	Det. Sharp WBCR admins	2
4	Belgrade Police	4/24	Final Planning meeting	Sgt. Doner Chief Putzke	2
5	Polson PD	6/22	Initial Contact Schedule demo	Joan Hart	1

2. Training schedule for locals on WBCR.

	Location	Date/time	Topic(s)
1	Gallatin/Three Forks	4/23	WBCR training and rollout
2	Belgrade Police Department	6/23-25	WBCR training and rollout
3			
4			

3. Project meetings attended/Travel for project promotion

	Location	Date/Time	Topic
1	FHWA/MHP/MDT Liaison meeting	5/7	Project updates
2	Teleconference	5/8	Work on plan for updating MARS conversion application to include GPS location for non-WBCR reports
3	Teleconference	5/14	Discussion for plan to get RMS data directly from New World users (Billings, Missoula, Great Falls)
4	Teleconference	6/2	Crash Report Alcohol Fields and issues in database
5	Teleconference	6/4	MARS – SmartCop conversion schema

4. Other Meetings attended

	Location	Date/time	Topic(s)
1	Helena	4/15-17	ArcGIS mapping workshop
2	San Diego	5/17-21	IACP Law Enforcement Information Technology Conference
3	Helena	6/15-18	CTS America on-site meetings
4			
5			
6			

5. Other relevant information

Quarterly reports will describe the past quarter's activities for WBCR trainings, and such as local benefit received because of the project, work accomplished, difficulties encountered, decisions made, or any other important information relative to the project.

I continue to be the only source for help for all WBCR users. We currently have 29 Agency masters (MHP not included) completed on the server.

Training was held as listed above.

Work continues to make inrows in the contacts for the Tribal Agencies. A meeting scheduled this quarter meet with the Northern Tribes DUI Task force was cancelled, but has been rescheduled for July.

One of the concerns we have from existing users, especially form larger departments, is the time involved to type in free text with regard to extensive biographical information on all occupants of vehicles, such as address, birthdates and other identifiers. These fields have been required by edit rule so they must be filled in, to date. All of this information has to be manually typed in by the WBCR user and takes a great deal of time, especially when there are multiple, non-driver occupants. We had meetings with MHP Records personnel and MDT Traffic Safety personnel to discuss the necessity of this information. It was determined that this information was not necessary or used in any of our agencies for data purposes. I have been working on the edit rules that I can do and have meetings scheduled with JITSD to assist in training me on the writing of the SQL statements that will be used in the cross table rules. During meetings with the vendor (CTS America) in June, we discussed application enhancements and other options to facilitate this. We are currently awaiting a proposal from them.

As part of these meetings, we came to the general consensus that we would rather have partial gathering of the MMUCC data, than for the agencies to abandon the WBCR and revert back to the MARS report. This adjustment should also assist in us setting up electronic data transfer from the larger agencies with their own RMS, to include Missoula PD, Great Falls PD, Billings PD and Havre PD, if it doesn't meet the entire MMUCC standard. We also discussed solutions to this with CTS America and are awaiting a price quote for an import method.

Continued solicitation of the smaller LEA for establishing use of the WBCR will continue. Training sessions are currently planned for MSU Police, Polson, Sheridan County, and Whitefish.

Data Support Project Manager (Cal Schock) *Quarterly report*

Year 5 of 4 year contract ***FFY 2015***

008

	Q1: Oct 1 – Dec 31
	Q2: Jan 1 – Mar 31
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X	Q4: Jul 1 – Sep 30

B. Contract deliverables & milestones

If an action item will not be completed on schedule, please indicate a timeframe for completion in the progress notes, and the reason for the delay.

6. Local agencies contacted in relation to the WBCR Project.

	Location	Date/time	Topic(s)	Attendee information *(e.g. prosecutors, law enforcement, DUI task forces)*	# attendees
1	Lame Deer Tribal	**July 2**	WebCrash feasibility for Northern Cheyenne	Chief Wind	2
2	Havre	**July 15**	Northern Tier Tribal Task Force	LEA, Records	7
3	Polson Police	**July 28**	WBCR Demo	Polson PD	4
4	Manhattan Police	July 29-30	WBCR Dem0	Manhattan PD	2
5	Cutbank Police	August 29	WBCR Agency Master List	Cutbank PD	1
6					
7					

7. Training schedule for locals on WBCR.

	Location	Date/time	Topic(s)
1	MSU Police Bozeman	July 30	1st WBCR training and rollout
2	Manhattan Police	Aug. 5 and 6	WBCR training and rollout
3	Polson Police	Aug. 26-27	WBCR training and rollout
4			

8. Project meetings attended/Travel for project promotion

	Location	Date/Time	Topic
1	Laurel PD	Sep. 1	Interface Options to database
2	Bozeman PD	Sep.1	Edit rules to require less input
3	West Yellowstone	Sep. 16	Troubleshooting, more training
4	MDT Helena	Sep. 17	UnApproved reports in database
5	MDT Helena	Sep. 17	TRSPU usage of traffic data

9. Other Meetings attended

	Location	Date/time	Topic(s)
1	Mountain Pacific S&P Conference	Aug. 17-20	IACP regional meeting
2	24/7 conference	Sep. 13-16	24/7 project
3	TRCC, MDT, Smartcop		
4			
5			
6			

10. Other relevant information

Quarterly reports will describe the past quarter's activities for WBCR trainings, and such as local benefit received because of the project, work accomplished, difficulties encountered, decisions made, or any other important information relative to the project.

I continue to be the only source for help for all WBCR users. We currently have 31 Agency masters completed on the server. I attend and contribute to TRCC and all SmartCop related meetings.

Training was held as listed above.

Work continues to make inrows in the contacts for the Tribal Agencies. A meeting completed this quarter to meet with the Northern Tribes DUI Task force. Made another WBCR demo and to members of Blackfeet, Rocky Boy, Fort Belknap and Fort Peck tribal LEA.

One of the concerns we have from existing users, especially form larger departments, is the time involved to type in free text with regard to extensive biographical information on all occupants of vehicles, such as address, birthdates and other identifiers. These fields have been required by edit rule so they must be filled in, to date. All of this information has to be manually typed in by the WBCR user and takes a great deal of time, especially when there are multiple, non-driver occupants. We had meetings with MHP Records personnel and MDT Traffic Safety personnel to discuss the necessity of this information. It was determined that this information was not necessary or used in any of our agencies for data purposes. I have been working on the edit rules that I can do and have meetings scheduled with JITSD to assist in training me on the writing of the SQL statements that will be used in the cross table rules. During meetings with the vendor (CTS America) in June, we discussed application enhancements and other options to facilitate this. We are still awaiting a proposal and costs from CTS America. This is always brought up on our bi-weekly web conferences.

As part of these meetings, we came to the general consensus that we would rather have partial gathering of the MMUCC data, than for the agencies to abandon the WBCR and revert back to the MARS report. This adjustment should also assist in us setting up electronic data transfer from the larger agencies with their own RMS, to include Missoula PD, Great Falls PD, Billings PD and Havre PD, if it doesn't meet the entire MMUCC standard. We also discussed solutions to this with CTS

America and are awaiting a price quote for an import method. This continues to be a focus and discussion on our bi-weekly calls. As of this report, CTS America has not provided any concrete solution. They have, however solicited and were given more information concerning the previous MARS data dictionary.

Continued solicitation of the smaller LEA for establishing use of the WBCR will continue. Training sessions are currently planned for another training session for MSU Police and West Yellowstone Police as well as a rollout in Cutbank, Eureka and possibly Shelby.

Data Support Project Manager (Cal Schock) *Quarterly report*

Year 5 of 4 year contract ***FFY 2015***

008

X	Q1: Oct 1 – Dec 31
	Q2: Jan 1 – Mar 31
	Q3: Apr 1 – Jun 30
	Q4: Jul 1 – Sep 30

C. Contract deliverables & milestones

If an action item will not be completed on schedule, please indicate a timeframe for completion in the progress notes, and the reason for the delay.

11. Local agencies contacted in relation to the WBCR Project.

	Location	**Date/time**	**Topic(s)**	**Attendee information** *(e.g. prosecutors, law enforcement, DUI task forces)*	**# attendees**
1	BlackFeet Tribal	Oct. 30	Followup contact attempt	Capt. Jesse Moss	1
2	Fort Belknap Tribal	Oct. 30	Followup contact attempt	Chief Hawkan Haakanson	1
3	Crow Tribal	Oct. 30	Followup contact attempt	Chief Jose Figueroa	1
4	Cheyenne Tribal	Oct. 30	Followup contact attempt	Chief Donovan Wind	1
5	Fort Peck Tribal	Oct. 30	Followup contact attempt	Chief Jim Summers	1
6	MSU Police	Nov. 18	Establish Agency Master	Officer Stephen Keim	1

7	Madison County SO	Nov. 24	Establish Agency Master	Sheriff Dave Schenk	1
8	Try all Tribal contacts again	Nov. 25	Followup contact attempts	See above	5
9	Whitefish Police	Nov. 25	Training schedule	Lt. Kelch	1

12. Training schedule for locals on WBCR.

	Location	**Date/time**	**Topic(s)**
1	Madison County Sheriff	Dec. 12-13	WBCR training and rollout
2			
3			
4			

13. Project meetings attended/Travel for project promotion

	Location	**Date/Time**	**Topic**
1	Helena	October 14	Annual Trial Safety Summit
2	Helena	October 15-16	Annual Statewide Traffic Safety Summit
3	All Current WBCR User Agencies	Nov. 26	Notification of server outage for program update.
4	Helena	Dec. 2	SmartCop applications update
5	Helena	Dec. 11	Meetings on MARS data updates and SIMS integration and adjusting MMUCC data needs.

14. Other Meetings attended

	Location	**Date/time**	**Topic(s)**
1	Helena	October 1-2	MHP Fall Management Conference
2	Bozeman	October 19-24	Bozeman Camera install
3			
4			
5			
6			

15. Other relevant information

Quarterly reports will describe the past quarter's activities for WBCR trainings, and such as local benefit received because of the project, work accomplished, difficulties encountered, decisions made, or any other important information relative to the project.

I continue to be the only source for help for all WBCR users. We will have to initiate a process to get the DOJ Help Desk involved in this process. We currently have 25 Agency masters (MHP not included) completed on the server.

Training was held as listed above. Madison County Sheriff was the only training this quarter.

Emphasis for this quarter was to be on a concerted efforts to get tribal agencies on board with the process of collecting tribal crash data electronically. I made several attempts at telephonic contact with the contacts I made at the Annual Tribal Safety Summit, but so far have not been able to get anyone to return my call. I will plan a trip in one of the next two quarters to travel personally to each tribal location.

One of the concerns we have from existing users, especially form larger departments, is the time involved to type in free text with regard to extensive biographical information on all occupants of vehicles, such as address, birthdates and other identifiers. These fields have been required by edit rule so they must be filled in, to date. All of this information has to be manually typed in by the WBCR user and takes a great deal of time, especially when there are multiple, non-driver occupants. We had meetings with MHP Records personnel and MDT Traffic Safety personnel to discuss the necessity of this information. It was determined that this information was not necessary or used in any of our agencies for data purposes. I will revisit and revamp the edit rules to change them from required fields to optional fields.

As part of these meetings, we came to the general consensus that we would rather have partial gathering of the MMUCC data, than for the agencies to abandon the WBCR and revert back to the MARS report. This adjustment should also assist in us setting up electronic data transfer from the larger agencies with their own RMS, to include Missoula PD, Great Falls PD, Billings PD and Havre PD, if it doesn't meet the entire MMUCC standard.

Continued solicitation of the smaller LEA for establishing use of the WBCR will continue. Training sessions are currently planned for Dillon PD, West Yellowstone PD and Ennis PD.

Data Support Project Manager (Cal Schock) *Quarterly report*

FFY 2016

008

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D. Contract deliverables & milestones

If an action item will not be completed on schedule, please indicate a timeframe for completion in the

progress notes, and the reason for the delay.

16. Local agencies contacted in relation to the WBCR Project.

	Location	**Date/time**	**Topic(s)**	**Attendee information** *(e.g. prosecutors, law enforcement, DUI task forces)*	**# attendees**
	Flathead Tribal	2/3/16	2015 unfinished reports and training refresh discussion	Captain Fiddler	1

17. Training schedule for locals on WBCR.

	Location	**Date/time**	**Topic(s)**
1			
2			

18. Project meetings attended/Travel for project promotion

	Location	**Date/Time**	**Topic**
	MHP IT Planning	2/1/16	Future IT projects
	Helena HQ	2/25/16	Crash committee meeting – create new crash report business rules

			and training

19. Other Meetings attended

	Location	Date/time	Topic(s)
1			
2			
3			
4			
5			
6			

20. Other relevant information

Quarterly reports will describe the past quarter's activities for WBCR trainings, and such as local benefit received because of the project, work accomplished, difficulties encountered, decisions made, or any other important information relative to the project.

I continue to be the only source for help for all WBCR users. Support ranges from questions from individual users to updating the server agency master profiles for adding new users, un-enabling old users and other maintenance. I act as the liaison between MHP and MDT records and the LEA users to alleviate any data issues that occur. We did not add any new agencies to the current 31 Agency masters completed on the server. I attend or conference in to and contribute to TRCC and all SmartCop related meetings.

No trainings were held this quarter.

The Web Based Crash report was developed and written win Microsoft Silverlight 4. Silverlight is the web applications framework that provides the functionalities of the application within the web browser environment. At the first rollout of the application, WebCrash was functional in all three mainstream browser; Microsoft Internet Explorer, Google Chrome and Mozilla Firefox. With recent changes in browser technologies, Chrome no longer supports Silverlight and Firefox will end support after 2016. Microsoft's Windows 10 new browser Edge, does not support Silverlight. Windows 10 does contain the older Internet Explorer browser and their website currently indicates support for IE and Silverlight on 64 bit machines to 2021. All this limits the parameters in which the application currently functions and future functionality. We have started talks with CTS America on the future of the application and what changes in programming methods and code will be the best answer for extended and more universal use of the product. We are currently in the exploratory phase to see what options are available to us.

[As part of these meetings, we came to the general consensus that we would rather have partial gathering of the MMUCC data, than for the agencies to abandon the WBCR and revert back to the MARS report. This adjustment should also assist in us setting up electronic data transfer from the larger agencies with their own RMS, to include Missoula PD, Great Falls PD, Billings PD and Havre PD, if it doesn't meet the entire MMUCC standard. We also discussed solutions to this with CTS America and are awaiting a price quote for an import method. This continues to be a focus and discussion on our bi-weekly calls. As of this report, CTS America has not provided any concrete solution. They have, however solicited and were given more information concerning the previous MARS data dictionary.] [As of this report date, we have not received a price quote on this matter. This will be brought up with our new JITSD project manager for resolution. We have started a process to set up meetings with Missoula PD administrators and IT personal to explore the option of setting up our own server to server data transfer of the MARS standard data that they collect. If we can come to an agreement and a feasible plan, this could potentially carry over to getting Billings PD and Great Falls PD data, as they use the same RMS vendor. This will be the focus of the next quarter.] After many tries and contacts with Missoula PD, I have been unsuccessful in getting any meaningful dialog set up. I am going to enlist the help of our JITSD personnel, as well as MDT personnel, and even Colonel Butler to try to get this moving.

Continued solicitation of the smaller LEA for establishing use of the WBCR will continue. There are currently no trainings planned.

SIMS: SAFETY INFORMATION MANAGEMENT SYSTEM (system running – TRCC reporting only)

Project ID: MT-P-00036

TRCC Project Priority: High

Lead Agency: Dept of Transportation – Traffic & Safety Bureau

Project Director / Primary Contact:

Name:	Kraig McLeod	Mark Keeffe
Title:	Safety Engineer	Operations Research Analyst
Agency:	MT Dept of Transportation	MT Dept of Transportation
Office:	Engineering Division	State Highway Traffic Safety Office
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City, ZIP:	Helena, MT 59620-1001	Helena, MT 59620-1001
Phone:	406-444-6256	406-444-3430
Email:	krmcleod@mt.gov	mkeeffe@mt.gov

Partner Agencies:

Name of the Agencies that are partners with the Lead Agency in the implementation of the project. Partner agencies may not be relevant to most projects, but if included, this helps document that more than one agency is responsible for the implementation and ultimate success of the project.

- Department of Transportation
- Department of Justice
- Montana Highway Patrol
- Local Law Enforcement Agencies
- Office of Court Administration
- FHWA/NHTSA/FMCSA

Project Description:

This section provides a brief overview of what the project will entail.

The goal for this project is to identify and implement the best long-term solution which will support the safety data and analysis goals of the Montana Department of Transportation (MDT), partner agencies, and Montana overall.

Accurate and complete crash and traffic data is the foundation for Montana's highway safety goals and ongoing efforts to meet Federal safety standards. Any computer application providing decision support for safety data and analysis activity must be capable of both storing and analyzing the considerable volume of data required to identify highway safety strategies and projects.

Although it is functional and serves its general purpose, the current Safety Management System (SMS) no longer meets the decision support needs of the agency, is expensive to maintain, and is very difficult and time consuming to modify. The current system also requires extensive manual effort to respond to stakeholder information requests and does not support the expanding business infrastructure.

The project team determined that the best alternative for the agency is to replace the current Safety Management System with a Commercial Off-The-Shelf (COTS) computer application. This alternative was approved by MDT executive management during the Safety Information Management System (SIMS) Phase II Project Milestone meeting held February 27, 2012.

The COTS alternative was selected based on:

- Shorter lead time; overall schedule
  - Implementation within 6 months of contract approval is a reasonable expectation.

- Fewest agency resources during implementation and for the life of the product.
  - The vendor will be responsible for patches and updates, regular maintenance, and any bug fixes.

- Lower up-front costs and overall best ROI
  - Based on similar implementations and the 2011 RFI responses, the vendor cost for implementation of a COTS solution is estimated at $750,000 including clean up and load of existing data from the current SMS.

The SIMS project is following a multi-phase approach, which was defined in 2011 and subsequently approved by MDT executive management. Each phase ends with a checkpoint, and sponsor approval requested prior to start of the next phase.

The phased approach will continue throughout this project, with milestones and checkpoints for each phase. Subsequent phases will be defined with the intent to ensure that project activities are manageable, to ensure incremental gains, and to reduce the risk associated with the overall project scope and complexity.

The following table provides a summary of the tasks currently anticipated for completion under each of the various phases:

IMPLEMENTATION ACTIVITY	
Phase I	**Initial implementation** with current data sources and functionality. • The current application (SMS) will be replaced & retired. • The current SMS data elements will be included. • The initial user base will encompass only current users of the existing SMS and current recipients of analysis from the existing SMS and Safety group.
Phase II	**Short planning phase** to solidify timeline and schedule for next phases • Definition of subsequent implementation phases • Creation of timeline, schedule, detailed project plan
NOTE: Beyond Phase II is "best guess" and will be updated during future phases.	
Phase III	**Expand existing internal data sources** to include all available required record-types and fields. • Include Traffic Counts, with related analysis, if not already implemented. • This phase may also include expanding existing internal data sources to include additional record-types and fields that are available but not currently used. • Expand user base to allow more users direct access to adhoc and query capabilities; expect this is the point at which users who are currently supported by agency staff would initiate their own analysis.
Phase IV	TBD

Projected Budget by Funding Source:

Provide funding source and projected budgets by year for the project. This will help establish future year funding estimates for the Section 408 funded programs and will demonstrate other funds being leveraged to improve the state traffic records system. (Show estimated thousands of dollars by state fiscal year.)

Funding Source		2013	2014	2015	2016	2016	Total
405 Funding		$400,000	$50,000	$0	$0	$0	$450,000.00
Other (STPX, HSIP eligible)		$350,000	$100,000	$50,000	$50,000	$0	$550,000.00

Project Area(s) and System(s)

Check all that apply.

	Accuracy	Completeness	Integration	Timeliness	Uniformity	Accessibility
Crash	☒	☒	☒	☒	☒	☒
Driver License/History	☐	☐	☐	☐	☐	☐
Injury Surveillance/EMS	☐	☐	☐	☐	☐	☐
Roadway	☒	☐	☒	☐	☐	☒
Citation/Adjudication	☐	☐	☐	☐	☐	☐
Vehicle Registration	☐	☐	☐	☐	☐	☐

Project Milestones:

Milestone	Projected Completion Date	Actual Completion Date	Status
Phase I	December 2013		
Phase II	February 2014		
Phase III	December 2014		
Phase IV	TBD		

Performance Measure(s):

Determine at least one performance measure for each planned/start-up/active project. The performance measure(s) must conform to one of the model performance measures published by NHTSA as a guide to help States monitor and improve the quality of the data in their traffic records systems.

Performance Area: Integration
System: Crash
Increase/Decrease: Increase
Measurement:
The number of links between the crash database and other traffic record databases.

Measurement Method:
After successfully linking SIMS with the DOJ CTS America system (new crash system) and the DOJ MARS (old crash system) to create one integrated MDT crash data system with full analytical capabilities, increase the count of the number of system links. After successfully linking SIMS with the MDT roadway system, increase the count of the number of system links. These links may be created in any order. Once this project moves into an active status, a baseline measure will be taken and goals set.

Activity Reports:

Report Completed By: Pierre Jomini Report Date: 09/19/2010
Report Time Frame: 06/16/2010 – 09/19/2010

Activity	
Problems	
Plans	
Comments	A feasibility study has been completed. The 3-phase proposal has been documented. This project is included in the MDT IT Strategic Plan.

Report Completed By: Kraig McLeod/Danielle Murphy

Report Date: 03/09/2011
Report Time Frame: 09/19/2010 – 03/09/2011

Activity	There has been no further movement on this project.
Problems	The MDT Executive Committee is still trying to determine the best way to prioritize large-scale projects. The SIMS project is still part of this discussion, but it has stalled.
Plans	
Comments	

Report Completed By: Kraig McLeod/Danielle Murphy Report Date: 4/6/2012
Report Time Frame: 03/10/2011 – 02/29/2012

Activity	MDT Management has given approval to move forward for development of a business case for a commercial off the shelf solution. The goal of the SIMS Working Group is to present the full business case to MDT management for approval by the early summer of 2012.
Problems	
Plans	
Comments	

Report Completed By: Kraig McLeod Report Date: 2/8/2013
Report Time Frame: 03/10/2012 – 02/29/2013

Activity	The business case for procurement of a commercial off the shelf (COTS) solution was approved by MDT executive management in the summer of 2012. Development of the request for proposal (RFP) is currently underway.
Problems	Staffing resources may delay the final development of the RFP.
Plans	
Comments	

Report Completed By: Mark Keeffe Report Date: 2/8/2013
Report Time Frame: 03/1/2013 – 6/30/2013

Activity	A project manager for the SIMS project has been hired by MDT (Aaron Dennis). The current plan for having the RFP ready for release to vendors is 9/1/13.
Problems	
Plans	Trying to edit down the RFP from its current length and breadth, to a small more focused document for procuring a Complete-off-the-Shelf software package.
Comments	

TRCC Strategic Plan Update and SWOT analysis (Completed)

An independent contractor will investigate and report on the resources and deficiencies of Montana State Agencies responsible for traffic records data collection, data storage and data dissemination. This research will inform the Traffic Records Coordinating Committee's continuing efforts to improve and coordinate traffic data collection and dissemination on the progress. (Project completed in February 2016)

- Contracted with KLJ Engineering in August 2015
- Completed TRCC strategic plan upgrade in February of 2016
- Adopted by TRCC in April 2016
- Currently posted on MDT website http://www.mdt.mt.gov/pubinvolve/trcc/

DOJ MHP Upgrades to JRCS System (on hold until 2017)

The Montana Highway Patrol (MHP) will require an update to its database transfer system with the Montana Department of Justice's (MDOJ) updated centralized statewide courts database system. MHP's currently data transfer protocol will not be compatible with the new MDOJ system. MHP requires this data transfer protocol to procure traffic citation adjudication data from the courts. This data is used and published by MHP and other MDOJ departments like the Montana Motor Vehicles Division (drivers licenses). (This project is contingent on a larger project currently underway in the Department of Justice. This project will supported by the TRCC in 2017 or 2018)

Performance Measures

Driver Database Model Performance Measure – Integration – D-I-1

- JRCS will establish a direct data link between the driver's information from MVD and the individual's citation adjudication data.

- JRCS is currently on hold until later in calendar year 2017.
- JRCS will become an actionable project upon completion of the Montana Supreme Court's database upgrade, currently scheduled for late 2017

Traffic Data Management System (system installed and running - TRCC reporting only)

The Traffic Data Management System (TDMS) is cloud-based database allowing uploading and analysis of data from MDT's numerous types of traffic counting equipment. The TDMS performs quality control checks, develops adjustment factors to normalize the data, and develops meaningful traffic statistics for use by various customers. Several stock reports are available to users, and querying options allow for more in-depth data and trend analysis. The database is coupled with geospatial features, and counts can be viewed an analyzed by map locations. The TDMS is designed for use by State DOT's and provides preformatted and exportable Federal submittals reports including TMAS and HPMS.

Performance Measures

Roadway Database Model Performance Measure – Timeliness – R-T-1

- MDT now has the ability to create, edit, and publish custom roadway data reports. Past data reporting techniques involved many worker hours of research, analysis, and synthesis to produce unique, one-off reports.

Roadway Database Model Performance Measure – Accessibility – R-X-1

- With the new capacity of the TDMS, MDT has expanded the number of roadways automatically characterized annually. Past reporting on many lower functional class roadways was aperiodic and based on estimation processes.

June 2016 TDMS update report

TRCC

Traffic Data Management System (TDMS): Benefits and Performance Measures

The cloud-based TDMS does not require proprietary software therefore internal and external customers can access traffic data at any time, from any location.

Customizing reports free up valuable Traffic staffing resources. A recent request to analyze driving trends (pre and post Montana's speed limit increase on the Interstate system) required approximately 16 hours of Traffic staff resources. The data intensive analysis was limited to the original request and therefore wasn't easily expanded or contracted to answer additional questions. The data acquisition and analysis methodology was incorporated into the TDMS as a customizable reporting tool to meet customer-driven speed data analysis needs. The TDMS report provides analysis results within minutes, as opposed to days, and is customizable by the customer based on their analysis parameters.

Traffic staff are working with other customers to incorporate additional data analysis and reporting needs into the TDMS with goals to reduce drain on Traffic's limited staff resources and at the same time improving customer satisfaction. Efficiencies in this area will be reported in future TRCC reports.

Improving the Quality of MDT's Traffic Program. TDMS' AADT Average by County by Functional Class report generates data-driven AADT values for lower functional class roadways which, due to various constraints, don't have regular traffic monitoring. These TDMS generated statistics replace a statewide AADT estimation process and provide a much better representation of AADTs by county and therefore resulting traffic statistics such as Vehicle Miles Traveled (VMT). Data quality improvements such as this will be reported in future TRCC reports.

LIST OF ACRONYMS

BIA Bureau of Indian Affairs
CHSP Comprehensive Highway Safety
Plan DOJ Department of Justice
DOT Department of Transportation
DPHHS Department of Public Health and Human
Services EMS Emergency Medical Services
EMS-TS Emergency Medical Services & Trauma Systems Section,
DPHHS FARS Fatality Analysis Reporting System
FMCSA Federal Motor Carrier Safety
Administration IHSP Indian Highway Safety Program
IJIS Integrated Justice Information System
LEAs Law Enforcement Agencies
MARS Montana Accident Records System
MCSAP Motor Carrier Safety Assistance
Program MDT Montana Department of
Transportation
MERLIN Montana Enhanced Registration & Licensing Information
Network MHP Montana Highway Patrol, DOJ
MMUCC Model Minimum Uniform Crash
Criteria MVD Motor Vehicle Division, DOJ
NEMSIS National EMS Information
System NGA National Governors Association
NHTSA National Highway Traffic Safety
Administration OCA Office of the Court Administrator
OPHI On-line Pre-Hospital Information
SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for
Users SC SmartCop
SIMS Safety Information Management System (proposed new MDT analysis
system) SMS Safety Management System (current MDT analysis system)
TRA Traffic Records Assessment
TRSP Montana Traffic Records Strategic Plan
TRCC Traffic Records Coordinating
Committee VMT Vehicle-Miles of Travel